SEQUENCE LISTING

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Arg		Asp	Ala	Cys	Glu	G1y 295	иѕр	ser	GΙÀ	ΩŢÃ	300	LHE	VAI	Mer	Lys	
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Gln	Ala		Ser	Leu	Leu	Gln		Val	Arg	Arg	Thr		Thr	Ser	Glu	
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1 7 1	50	1111	1 110	THE	71511	55	8		1110	01,	60	01)	014		Пор	
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200	art	000		nen	cta	cta	tgt		acc	aac	ctc	atc		gac	cac	384
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БУБ	Set	115	OIII	oru	Leu	Leu	120	Oly	пια	Der	Deu	125	001	пор	111 B	
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agc ccc ttt													900
Ser Pro Phe	Asn Asn		lrp	lyr	GIn	Met		TIE	vaı	Ser	irp		
305		310					315					320	
gaa ggc tgt													1008
Glu Gly Cys	Asp Arg	Asp	Gly	Lys	Tyr	Gly	Phe	Tyr	Thr	His	Val	Phe	
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Met Ala His 1	Val Arg	Gly				10					15		
Met Ala His	Val Arg 5 Ser Leu	Gly			G1n	10				Ala	15		
Met Ala His 1 Ala Leu Cys	Val Arg 5 Ser Leu 20	Gly	His	Ser	Gln 25	10 His	Val	Phe	Leu	Ala 30	15 Pro	Gln	
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Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp Ile

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Pro Val Cys 210	Leu Pro	Asp Arg 215		· Ala Al	a Ser 220	Leu	Leu	Gln	Ala	
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Thr Ala Asn	Val Gly 245		Gln Pro	Ser Va 250	l Leu	Gln	Val	Val 255	Asn	
Leu Pro Ile	Val Glu 260	Arg Pro	Val Cys 265		p Ser	Thr	Arg 270	Ile	Arg	
Ile Thr Asp 275	Asn Met	Phe Cys	Ala Gly 280	Tyr Ly	s Pro	Asp 285	Glu	Gly	Lys	
Arg Gly Asp 290	Ala Cys	Glu Gly 295		Gly Gl	y Pro 300	Phe	Val	Met	Lys	
Ser Pro Phe 305	Asn Asn	Arg Trp	Tyr Gln	Met Gl		Val	Ser	Trp	Gly 320	
Glu Gly Cys	Asp Arg		Lys Tyr	Gly Pho	e Tyr	Thr	His	Val 335	Phe	
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caa gca cgg Gln Ala Arg 35					Thr					144
tac cag act Tyr Gln Thr 50 *	ttc ttc	aat ccg								192
	Phe Phe	Asn Pro	Arg Thr	Phe GIS	Ser 60	С ІУ (Glu	Ala	ASP	
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Ser	Asn	Ala	G111	Tle	Glv	Met	Ser	Pro	Trp	Gln	Val	Met	Leu	Phe	Arg	
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	_			_	_				_		_	Pro		_	_	
пр		Leu	1111	пта	пта		Cys	Leu	Den	1 9 1		110	пр	изр	БуЗ	
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aac	ttc	acc	gag	aat	gac	ctt	ctg	gtg	cgc	att	ggc	aag	cac	tcc	cgc	480
Asn	Phe	Thr	Glu	Asn	Asp	Leu	Leu	Val	Arg	Ile	Gly	Lys	His	Ser	Arg	
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aca	аоо	tac	σασ	റമ	aac	att	ga a	ลลฮ	ata	tcc	atø	ttg	gaa	aag	atc	528
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Tür	Arg	I y I	GIU	_	ASII	rre	GIU	Lys		Ser	Met	Leu	GIU		rre	
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Tyr	Ile	His	Pro	Arg	Tyr	Asn	Trp	Arg	Glu	Asn	Leu	Asp	Arg	Asp	Ile	
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acc.	cta	ata		cta	221	224	cct		acc	ttc	ant	gac		211	cac	624
_	_	_	_		_	_		_	_		_	_				024
Ala	Leu		Lys	Leu	Lys	Lys		vai	Ala	Pne	Ser	Asp	ıyr	шe	HIS	
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Pro	Val	Cys	Leu	Pro	Asp	Arg	Glu	Thr	Ala	Ala	Ser	Leu	Leu	Gln	Ala	
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~~~		000	~~~	000	at a		~~~	t a a	~~~	000		224	an a	200	taa	720
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Gly	Tyr	Lys	Gly	Arg	Val	Thr	Gly	Trp	Gly	Asn	Leu	Lys	Glu	Thr	Trp	
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Thr	Ala	Asn	Val	Glv	Lvs	Glv	Gln	Pro	Ser	Val	Leu	Gln	Val	Val	Asn	
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- 4								<b>.</b>			+					016
												acc				816
Leu	Pro	lle	Val	Glu	Arg	Pro	Val	Cys	Lys	Asp	Ser	Thr	Arg	He	Arg	
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Ile	Thr	Asp	Asn	Met	Phe	Cvs	Ala	Glv	Tvr	Lys	Pro	Asp	Glu	Gly	Lys	
		275				•	280		•	•		285		•	•	
								+					~+ ~	.+.	~~~	010
												ttt				912
Arg	Gly	Asp	Ala	Cys	Glu	Gly	Asp	Thr	Gly	Gly	Pro	Phe	Val	Met	Lys	
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											_					1000
gaa	ggc	tgt	gac	cgg	gat	ggg						aca				1008
		_						TD.	C1	DI	and the same of th	THE	(T *			
Glu		Cys	Asp	Arg	Asp	Gly	Lys	lyr	GIA	rne	lyr	Inr	Hls	Vai	Phe	
Glu		Cys		Arg 325	Asp	Gly	Lys	lyr	330	rne	lyr	Inr	HIS	335	Phe	
	Gly			325					330					335		1056
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Tyr Gln Thr Phe Phe Asn Pro Arg Thr Phe Gly Ser Gly Glu Ala Asp 50 55 60

Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys Thr 70 75 80

Glu Arg Glu Leu Leu Glu Ser Tyr Ile Asp Gly Arg Ile Val Glu Gly 85 90 95

Ser Asp Ala Glu Ile Gly Met Ser Pro Trp Gln Val Met Leu Phe Arg 100 105 110

Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg

Trp Val Leu Thr Ala Ala His Cys Leu Leu Tyr Pro Pro Trp Asp Lys 130 135 140

Asn Phe Thr Glu Asn Asp Leu Leu Val Arg Ile Gly Lys His Ser Arg 145 150 155 160

Thr Arg Tyr Glu Arg Asn Ile Glu Lys Ile Ser Met Leu Glu Lys Ile 165 170 175

Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp Ile 180 185 190

Ala Leu Met Lys Leu Lys Lys Pro Val Ala Phe Ser Asp Tyr Ile His 195 200 205

Pro Val Cys Leu Pro Asp Arg Glu Thr Ala Ala Ser Leu Leu Gln Ala 210 215 220

Gly Tyr Lys Gly Arg Val Thr Gly Trp Gly Asn Leu Lys Glu Thr Trp 225 230 235 240

Thr Ala Asn Val Gly Lys Gly Gln Pro Ser Val Leu Gln Val Val Asn 245 250 255

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Ile Thr Asp Asn Met Phe Cys Ala Gly Tyr Lys Pro Asp Glu Gly Lys
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Arg Gly Asp Ala Cys Glu Gly Asp Thr Gly Gly Pro Phe Val Met Lys 290 295 300

Ser Pro Phe Asn Asn Arg Trp Tyr Gln Met Gly Ile Val Ser Trp Gly 305 310 315 320

Glu Gly Cys Asp Arg Asp Gly Lys Tyr Gly Phe Tyr Thr His Val Phe

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Ala Leu Cys Ser Leu Val His Ser Gln His Val Phe Leu Ala Pro Gln
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
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Thr Ala Asn	245			250					255		816
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Ala Leu Met Lys Leu Lys Lys Pro Val Ala Phe Ser Asp Tyr Ile His
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Arg Gly Asp Ala Cys Glu Ala Asp Ala Gly Gly Pro Phe Val Met Lys
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		cgg Arg														111
GIII	піа	35	561	Leu	Dou	OIII	40	741	111.6		1111	45				
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	Gly	Leu	Arg	Pro		Phe	Glu	Lys	Lys		Leu	Glu	Asp	Lys	1nr 80	
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-		Glu														200
Glu	VI B	oru	Leu	85	Olu	961	1 7 1	110	90	01)		110	, 41	95	01)	
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Lys	Ser	Pro	Gln	Glu	Leu	Leu		Gly	Ala	Ser	Leu		Ser	Asp	Arg	
4		115		~~~	~~~		120	at a	at a	t 0.0	۵۵۳	125	† a a	asc.	220	432
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irb	130	Leu	1111	ΛIα	MIA	135	Oy 3	БСи	Dou	1 7 1	140	110	110	·····p	2,2	
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		Asn														
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ctg	ссс	att	gtg	gag	cgg	ccg	gtc	tgc	aag	gac	tcc	acc	cgg	atc	cgc	816
Leu	Pro	Ile	Val	Glu	Arg	Pro	Val	Cys	Lys	Asp	Ser	Thr		Ile	Arg	
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atc	act	gac	aac	atg	ttc	tgt	gct	ggt	tac	aag	cct	gat	gaa	ggg	aaa	864

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Arg Gly Asp Ala Cys Glu Gly Asp Val Gly Gly Pro Phe Val Met Lys
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Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys Thr
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
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Thr Arg Tyr Glu Arg Asn Ile Glu Lys Ile Ser Met Leu Glu Lys Ile
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Ala Leu Met Lys Leu Lys Lys Pro Val Ala Phe Ser Asp Tyr Ile His
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                                                205
Pro Val Cys Leu Pro Asp Arg Glu Thr Ala Ala Ser Leu Leu Gln Ala
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<pre>&lt;400&gt; 17 atg gcg cac gtc cga ggc ttg cag ctg cct ggc tgc ctg gcc ctg gct Met Ala His Val Arg Gly Leu Gln Leu Pro Gly Cys Leu Ala Leu Ala 1</pre>	
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Trp	Val 130	Leu	Inr	Ala	Ala	H1S 135	Cys	Leu	Leu	ıyr	140	Pro	irp	ASP	Lys	
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Thr	Arg	Tyr	Glu	Arg 165	Asn	lle	Glu	Lys	11e 170	Ser	Met	Leu	Glu	Lys 175	lle	
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Pro	Val 210	Cys	Leu	Pro	Asp	Arg 215	Glu	Thr	Ala	Ala	Ser 220	Leu	Leu	Gln	Ala	
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Gly	Tyr	Lys	Gly	Arg	Val	Thr	Gly	${\tt Trp}$	Gly	Asn	Leu	Lys	Glu	Thr	Trp	
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Thr	Ala	Asn	Val	Gly	Lys	Gly	Gln	Pro	Ser	Val	Leu	Gln	Val	Val	Asn	
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Leu	Pro	Ile		Glu	Arg	Pro	Val		Lys	Asp	Ser	Thr		He	Arg	
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	act	-		-		_	_									864
116	Thr	275	ASN	мес	rne	Cys	280	GIY	I y I	Lys	FIO	285	GIU	Gly	Lys	
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Ser	Pro	Phe	Asn	Asn	Arg	Trp	Tyr	Gln	Met	Gly	Ile	Val	Ser	Trp	Gly	
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gaa	ggc	tgt	gac	cgg	gat	ggg	aaa	tat	ggc	ttc	tac	aca	cat	gtg	ttc	1008
Glụ	Gly	Cys	Asp	Arg 325	Asp	Gly	Lys	Tyr	Gly 330	Phe	Tyr	Thr	His	Val 335	Phe	
cgc	ctg	aag	aag		ata	cag	aag	gtc		gat	cag	ttt	gga		tag	1056
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G1n	Ala	Arg	Ser	Leu	Leu	Gln	Arg	Val	Arg	Arg	Thr	Ala	Thr	Ser	Glu
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Cvs	Glv	Leu	Arg	Pro	Leu	Phe	Glu	Lvs	Lvs	Ser	Leu	Glu	Asp	Lys	Thr
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	Arg	G1u	Leu	Leu	Glu	Ser	Tvr	Ile	Asp	Glv	Arg	Ile	Val	Glu	Glv
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Ser	Asp	Ala	Glu	Ile	G1v	Met	Ser	Pro	Trp	Gln	Val	Met	Leu	Phe	Arg
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Lvs	Ser	Pro		Glu	Leu	Leu	Cvs		Ala	Ser	Leu	Ile		Asp	Arg
	001	115	·	~~~		200	120	-1,				125		<u>-</u> -	
Trn	Val		Thr	Ala	Ala	His		Leu	Leu	Tvr	Pro		Trp	Asp	Lvs
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Asn		Thr	GIn	Asn	Asn		Leu	Va1	Arg	T1e		Lvs	His	Ser	Arg
145	1 1,0	1111	010	11011	150	Dou	Dou			155	01)	2,0			160
	Aro	Tyr	Glu	Arg		I1e	Glu	I.vs	Tle		Met	Leu	Glu	l.vs	
1111	8	. , .	014	165	11011	110	010	2,5	170	001		204	014	175	
Tyr	Τlο	Hie	Pro	Arg	Tyr	Asn	Trn	Ara		Asn	Leu	Asn	Aro		Tle
1,1	110	5	180	111 8	.,.	11011	пр	185	010	11011	204	пор	190	пор	
Δ1a	I eu	Mot		Leu	Lve	Ive	Pro		Ala	Phe	Ser	Asn		Πe	His
пта	Lou	195	Lys	Lcu	Lys	L) S	200	, aı	nra	1 110	OCI	205	431	110	mo
Pro	Val		Lau	Pro	Acn	Ara		Thr	Δ1a	Δla	Sar		Len	G1n	Ala
110	210	Cys	Leu	110	nsp	215	Olu	1111	nia	MIG	220	Leu	Leu	OIII	mu
C1 v		Lvc	G1 v	Arg	Val		G1 v	Trn	Cl v	Aen		Ive	G111	Thr	Trn
225	lyı	БуЗ	Oly	ni g	230	1111	Oly	пр	Oly	235	Leu	Lys	Olu	1111	240
	Λlà	A an	Va 1	Gly		Gly	Gln	Pro	Sor		Lou	Gln	Val	Val	
1111	піа	nsii	Val	245		Oly	OIII	110			Leu		va1	255	
Lau	Dao	T1.	Vo 1			Dana	Vol	Cva					Ana		
Leu	F10	rre		Glu	Arg	110	Val		гуѕ	ASP	Set	1111	270	116	VI B
т1.	T1	A	260	W - 4	DI	C	۸٦ -	265	Т	T	D	۸		C1	T
116	ınr		Asn	Met	Pne	Cys		GIY	lyr	Lys	Pro		GIU	GTA	Lys
	61	275			0.1	0.1	280		0.1	0.1	n .	285	17 7		,
Arg		Asp	Ala	Cys	GIU		Asp	Asp	Gly	GIÀ		Pne	vai	Met	Lys
_	290	5.				295		0.1	· ·	6.7	300			<b></b>	01
	Pro	Phe	Asn	Asn		Trp	Tyr	GIn	Met		He	Val	Ser	Trp	
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Glu	Gly	Cys	Asp	Arg	Asp	Gly	Lys	lyr		Phe	lyr	Ihr	Hls		Phe
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Ala Leu Cys Ser Leu Val His Ser Gln His Val Phe Leu Ala Pro Gln
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Gln Ala Arg Ser Leu Leu Gln Arg Val Arg Arg Thr Ala Thr Ser Glu
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Tyr Gln Thr Phe Phe Asn Pro Arg Thr Phe Gly Ser Gly Glu Ala Asp
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                                                 125
        115
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Trp Val Leu Thr Ala Ala His Cys Leu Leu Tyr Pro Pro Trp Asp Lys
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GIN	Ala	Arg 35	ser	Leu	Leu	GŤII	40	Val	AI g	AT 8	1111	45	1111	261	oru	
Tur	Gln	Thr	Phe	Phe	Asn	Pro		Thr	Phe	Glv	Ser		G1u	Ala	Asp	
1 9 1	50	111,1	1 110	THO	11011	55				<i>,</i>	60	,				
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Glu	Arg	Glu	Leu	Leu	Ġlu	Ser	Tyr	Ile	Asp	Gly	Arg	Ile	Val	Glu	Gly	
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Cys 65	Gly	Leu	Arg		Leu 70	Phe	Glu	Lys	Lys	Ser 75	Leu	Glu	Asp	Lys	Thr 80	
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Le	ı Pro	lle	e Val	Glu	Arg	g Pro	Va:	l Cys	s Lys	s Ası	Se:	r Thi	. Ar	, Il∈	Arg	
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Ile Thr Asp	Asn Met	Phe Cys	Ala Gl	y Tyr	Lys	Pro	Asp	Glu	Gly	Lys	
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Arg Gly Asp	Ala Cys	Glu Ala	Asp Se	r Gly	Gly	Pro	Phe	Val	Met	Lys	
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agc ccc ttt											960
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Glu Arg Glu		Glu Ser	Tyr 11		GLY	Arg	TIE	val		GIÀ	
	85		a 5	90	0.7	** 7			95 DI	A	
Ser Asp Ala	Glu Ile	Gly Met	. Ser Pr	n irn			MA CA T	L.e11	rne	vr. g	
					GIN	vai	Mec		1		
	100		10)5				110			
Lys Ser Pro	Gln Glu		10 Cys Gl)5			Ile	110			
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D V-1 C			200			205			
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Glu Gly Cys	Asp Arg 325	Asp Gly	Lys Tyr	Gly I 330	Phe Tyr	Thr I	His Va 33		
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age		t.t.t.	aac	aac	CØC		t.a.t.	caa	at.g	aac	atc	gtc	tca	tgg	ggt	960
_													Ser			
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	aac	tot	gac	റമമ		ppp	ลลล	tat	880		tac	aca	cat	gtg		1008
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JIU	OIY	J, 5	Toh	325	4	- L J	-, 0	- , -	330		- , -			335		
0.00	cta	220	220		ata	cao	ឧឧଦ	øtc		gat	cag	t.t.t	gga		t.aø	1056
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ur g	<i>∟</i> eu	دوں	340	ттЪ	116	0111	د ر د	345	110	p	J 211		350	J U		
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Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys Thr
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
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Asn Phe Thr Glu Asn Asp Leu Leu Val Arg Ile Gly Lys His Ser Arg
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Thr Arg Tyr Glu Arg Asn Ile Glu Lys Ile Ser Met Leu Glu Lys Ile
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Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp Ile
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Gly Tyr Lys Gly Arg Val Thr Gly Trp Gly Asn Leu Lys Glu Thr Trp
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Thr Ala Asn Val Gly Lys Gly Gln Pro Ser Val Leu Gln Val Val Asn
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Leu Pro Ile Val Glu Arg Pro Val Cys Lys Asp Ser Thr Arg Ile Arg
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Ser Pro Phe Asn Asn Arg Trp Tyr Gln Met Gly Ile Val Ser Trp Gly
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	er Leu Leu Gln A	egg gtc egg ega acc Arg Val Arg Arg Thr 40		
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Leu Pro Ile	Val Glu Arg	Pro Val Cys	Lys Asp Ser Thr	Arg Ile Arg
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	Arg Pro Leu		Lys Ser Leu Glu	Asp Lvs Thr
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		Ser Tur Ila	Asp Gly Arg Ile	
ora vig ora	85		90	95
	Ųΰ			

Ser	Asp	Ala	Glu 100		Gly	Met	Ser	Pro 105	Trp	G1n	Val	Met	Leu 110		Arg	
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lyr	He	His	180	Arg	I y I	ASII	īīh	185	Giu	ASII	Leu	nsp	190	vsh	116	
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III	111G	11011	141	245	دري	013	0 111	.10	250	, 41	Jou	0111	, 41	255		
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg 115 120 125	
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Gly Tyr Lys Gly Arg Val Thr Gly Trp Gly Asn Leu Lys Glu Thr Trp	
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Leu Pro Ile			ro Val			Ser	Thr	Arg 270	Ile	Arg	
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305					310			+-+	~~~	315	+00	0.00	ont	at a		1008
														gtg Val		1000
ard	ΩŢΆ	Cys	ush	325	ush	GIY	LyS	тул	330	1 116	ТÄТ	1 117	1112	335	1116	
cac	cto	ຂຂຕ	ຂອດ		ata	ርጸወ	ลลฮ	gtc		gat	Cag	t.t.t.	gga	gag	tag	1056
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<213> Homo sapiens

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Gln	Ala	Arg	Ser	Leu	Leu	Gln	Arg	Val	Arg	Arg	Thr	Ala	Thr	Ser	Glu
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Tyr	Gln	Thr	Phe	Phe	Asn	Pro	Arg	Thr	Phe	Gly	Ser	Gly	Glu	Ala	Asp
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Cys	Gly	Leu	Arg	Pro	Leu	Phe	Glu	Lys	Lys	Ser	Leu	Glu	Asp	Lys	
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Ser	Asp	Ala	Glu	Ile	Gly	Met	Ser	Pro	Trp	Gln	Val	Met	Leu	Phe	Arg
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		Cvs	Asp	Arg	Asp	Gly	Lys	Tyr	Gly	Phe	Tyr	Thr	His	Val	Phe
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Thr Ala Asn		Lys Gi	/ GIII	FIO	250	vai	Leu	GIII	val	255	non	
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ctg ccc att												010
Leu Pro Ile		Arg Pr	o vai	265	Lys	ASD	Set	1111	270	116	VI B	
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atc act gac												001
Ile Thr Asp	Asn Met	rne Cy	280	GIY	LAT	Lys	110	285	GIU	Oly	Lys	
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Arg Gly Asp												012
	Ala Cys	29		діа	GIY	Gly	300	1 116	141	mee	L) S	
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Ser Pro Phe												
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Glu Gly Cys												2,500
Gid Gly Cys	325	ASP OI	у Буз	1 9 1	330	1 110	1,1			335		
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	Arg	Tyr	Glu	Arg 165		Ile	Glu	Lys	Ile 170		Met	Leu	Glu	Lys 175	Ile	
Tyr	Ile	His			Tyr	Asn	Trp	Arg 185		Asn	Leu	Asp	Arg 190		Ile	
Ala	Leu	Met	180 Lys	Leu	Lys	Lys			Ala	Phe	Ser	Asp 205		Ile	His	
		195 Cys	Leu	Pro	Asp		200 Glu	Thr	Ala	Ala			Leu	Gln	Ala	
Gly	210 Tyr	Lys	Gly	Arg		215 Thr	Gly	Trp	Gly		220 Leu	Lys	Glu	Thr		
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Leu	Pro	Ile		245 Glu	Arg	Pro	Val		250 Lys	Asp	Ser	Thr		255 Ile	Arg	
Ile	Thr	Asp	260 Asn	Met	Phe	Cys		265 Gly	Tyr	Lys	Pro	Asp 285	270 Glu	Gly	Lys	
		275 Asp	Ala	Cys	Glu		280 Asp	Ala	Gly	Gly	Pro		Val	Met	Lys	
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caa	gca	cgg Arg	20 tcg	ctg	ctc	cag	cgg	25 gtc	cgg	cga	acc	gcc	30 acc	agt	gag	144
		35					40			ggc		45				192

Tyr	Gln 50	Thr	Phe	Phe	Asn	Pro 55	Arg	Thr	Phe	Gly	Ser 60	Gly	Glu	Ala	Asp	
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gaa	_				gaa	tcc Ser										288
				atc		atg Met			tgg							336
		Pro	cag			ctg Leu		ggg					agt			384
	Val					gcc Ala	tgc				Pro	ссс				432
						135 ctt Leu				Ile					Arg	480
						att Ile										528
						aac Asn										576
						aag Lys										624
cct	gtg	195 tgt	ctg	ccc	gac	agg Arg	200 gag	acg	gca	gcc	agc	205 ttg	ctc	cag	gct	672
gga	210 tac	aag	ggg	cgg	gtg	215 aca	ggc	tgg	ggc	aac	220 ctg	aag	gag	acg	tgg	720
225					230	Thr				235					240	768
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	Gly					ggg Gly	gac				Pro	ttt				912
						295 tgg Trp										960

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315
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Glu Gly Cys Asp Arg Asp Gly Lys Tyr Gly Phe Tyr Thr His Val Phe
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                                    330
                                                                     1056
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                            40
Tyr Gln Thr Phe Phe Asn Pro Arg Thr Phe Gly Ser Gly Glu Ala Asp
Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys Thr
                    70
                                        75
Glu Arg Glu Leu Leu Glu Ser Tyr Ile Asp Gly Arg Ile Val Glu Gly
                                    90
Ser Asp Ala Glu Ile Gly Met Ser Pro Trp Gln Val Met Leu Phe Arg
Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
                            120
Trp Val Leu Thr Ala Ala Ala Cys Leu Leu Tyr Pro Pro Trp Asp Lys
                        135
Asn Phe Thr Glu Asn Asp Leu Leu Val Arg Ile Gly Lys His Ser Arg
                    150
                                        155
145
Thr Arg Tyr Glu Arg Asn Ile Glu Ala Ile Ser Met Leu Glu Lys Ile
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                165
Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp Ile
                                185
Ala Leu Met Lys Leu Lys Lys Pro Val Ala Phe Ser Asp Tyr Ile His
                            200
Pro Val Cys Leu Pro Asp Arg Glu Thr Ala Ala Ser Leu Leu Gln Ala
                        215
Gly Tyr Lys Gly Arg Val Thr Gly Trp Gly Asn Leu Lys Glu Thr Trp
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                                        235
Thr Ala Asn Val Gly Lys Gly Gln Pro Ser Val Leu Gln Val Val Asn
                245
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Leu Pro Ile Val Glu Arg Pro Val Cys Lys Asp Ser Thr Arg Ile Arg
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Ile Thr Asp Asn Met Phe Cys Ala Gly Tyr Lys Pro Asp Glu Gly Lys

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Arg Gly Asp Ala Cys Glu Gly Asp Ala Gly Gly Pro Phe Val Met	Lys
290 295 300	
Ser Pro Phe Asn Asn Arg Trp Tyr Gln Met Gly Ile Val Ser Trp	Gly
305 310 315	320
Glu Gly Cys Asp Arg Asp Gly Lys Tyr Gly Phe Tyr Thr His Val	
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Ala Leu Cys Ser Leu Val His Ser Gln His Val Phe Leu Ala Pro	
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caa gca cgg tcg ctg ctc cag cgg gtc cgg cga acc gcc acc agt	gag 144
Gln Ala Arg Ser Leu Leu Gln Arg Val Arg Arg Thr Ala Thr Ser	Glu
35 40 45	
tac cag act ttc ttc aat ccg agg acc ttt ggc tcg gga gag gca	
Tyr Gln Thr Phe Phe Asn Pro Arg Thr Phe Gly Ser Gly Glu Ala	Asp
50 55 60 tgt ggg ctg cga cct ctg ttc gag aag aag tcg ctg gag gac aaa	acc 240
Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys	
65 70 75	80
gaa aga gag ctc ctg gaa tcc tac atc gac ggg cgc att gtg gag	ggc 288
Glu Arg Glu Leu Leu Glu Ser Tyr Ile Asp Gly Arg Ile Val Glu	Gly
85 90 95	
tcg gat gca gag atc ggc atg tca cct tgg cag gtg atg ctt ttc	
Ser Asp Ala Glu Ile Gly Met Ser Pro Trp Gln Val Met Leu Phe	Arg
aag agt ccc cag gag ctg ctg tgt ggg gcc agc ctc atc agt gac	cgc 384
Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp	
115 120 125	- · - · G
tgg gtc ctc acc gcc gcc tgc ctc ctg tac ccg ccc tgg gac	aag 432
Trp Val Leu Thr Ala Ala Ala Cys Leu Leu Tyr Pro Pro Trp Asp	Lys
130 135 140	cgc 480

Asn Phe Thr	Glu Asn	Asp Leu	Leu Val	Arg I	le Gly	Ala Hi	s Ser	Arg	
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Thr Arg Tyr	Glu Arg	Asn Ile	Glu Lys	Ile S	Ser Met	Leu Gla	ı Lys	Ile	
	165			170			175		
tac atc cac	ccc agg	tac aac	tgg cgg	gag a	ac ctg	gac cgg	g gac	att 57	76
Tyr Ile His	Pro Arg	Tyr Asn	Trp Arg	Glu A	sn Leu	Asp Arg	g Asp	Ile	
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Ala Leu Met									
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Pro Val Cys					_				
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Gly Tyr Lys					_			_	
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Thr Ala Asn									
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Leu Pro Ile								<u> </u>	
204 110 110	260		265	-,		270		6	
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Ile Thr Asp	_	_							_
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Ala Leu Cys		Vol Uic	Son Cla		al Pho	lau Ala		Gln	
nia Leu Cys	per ren	ANT UTS	Set GIU	1112 49	ar the	ren vis	1.10	OTII	

Gln	Ala	Arg 35	Ser	Leu	Leu	Gln	Arg 40	Val	Arg	Arg	Thr	Ala 45	Thr	Ser	Glu
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Cys 65	Gly	Leu	Arg	Pro	Leu 70	Phe	Glu	Lys	Lys	Ser 75	Leu	Glu	Asp	Lys	Thr 80
Glu	Arg	Glu	Leu	Leu 85	Glu	Ser	Tyr	Ile	Asp 90	Gly	Arg	Ile	Val	Glu 95	Gly
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Lys	Ser	Pro 115	Gln	Glu	Leu	Leu	Cys 120	Gly	Ala	Ser	Leu	Ile 125	Ser	Asp	Arg
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Thr	Arg	Tyr	G1u	Arg 165	Asn	Ile	Glu	Lys	Ile 170	Ser	Met	Leu	Glu	Lys 175	Ile
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Pro	Val 210	Cys	Leu	Pro	Asp	Arg 215	Glu	Thr	Ala	Ala	Ser 220	Leu	Leu	Gln	Ala
Gly 225	Tyr	Lys	Gly	Arg	Val 230	Thr	Gly	Trp	Gly	Asn 235	Leu	Lys	Glu	Thr	Trp 240
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		Asp 275					280					285			
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305		Phe			310					315					320
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1				5					10					15		
gcc	ctg	tgt	agc	ctt	gtg	cac	agc	cag	cat	gtg	ttc	ctg	gct	cct	cag	96
Ala	Leu	Cys	Ser	Leu	Val	His	Ser	Gln	His	Val	Phe	Leu	Ala	Pro	Gln	
		•	20					25					30			
caa	oca.	CEE		ctg	ctc	cag	cgg	gtc	cgg	cga	acc	gcc	acc	agt	gag	144
Gln	Δla	Ara	Ser	Leu	Leu	Gln	Arg	Val	Arg	Arg	Thr	Ala	Thr	Ser	Glu	
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aac	ם ב	The	. gas	, aac	Acn	Lau	Len	Val	Arg	Tle	• G1v	, Lvs	His	s Ser	Arg	
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tac	ato	cac	ccc	agg	g tac	aac	tgg	g cgg	gag	g aac	CLE	g gad	. Am	g gad	att	. 010
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Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp 180 185 190	Ile
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	Gly															
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Tyr Gln Thr Phe Phe Asn Pro Arg Thr Phe Gly Ser Gly Glu Ala Asp
Cys Gly Leu Arg Pro Leu Phe Glu Lys Lys Ser Leu Glu Asp Lys Thr
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
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Tyr Ile His Pro Arg Tyr			Ile
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gcc ctg atg aag ctg aag Ala Leu Met Lys Leu Lys			
Ala Leu Met Lys Leu Lys 195	200	205	
cct gtg tgt ctg ccc gac			gct 672
Pro Val Cys Leu Pro Asp			
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Gly Tyr Lys Gly Arg Val	Thr Gly Trp Gly Asn	Leu Lys Glu Thr	Trp
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aca gcc aac gtt ggt aag			
Thr Ala Asn Val Gly Lys			Asn
245	250	255	cgc 816
ctg ccc att gtg gag cgg Leu Pro Ile Val Glu Arg			
Leu Pro 11e val Glu Arg	265	270	0
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Ile Thr Asp Asn Met Phe			
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Arg Gly Asp Ala Cys Glu	Gly Asp Ala Gly Gly	Pro Phe Val Met	Lys
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Gln Ala Arg Ser Leu Leu	ı Gln Arg Val Arg Arg	Thr Ala Thr Ser	Glu
35	40	45	
Tyr Gln Thr Phe Phe Asr	n Pro Arg Thr Phe Gly	Ser Gly Glu Ala	Asp
50	55	60	

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Glu Arg Glu Leu Leu Glu Ser Tyr Ile Asp Gly Arg Ile Val Glu Gly
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Ser Asp Ala Glu Ile Gly Met Ser Pro Trp Gln Val Met Leu Phe Arg
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Lys Ser Pro Gln Glu Leu Leu Cys Gly Ala Ser Leu Ile Ser Asp Arg
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Trp Val Leu Thr Ala Ala Ala Cys Leu Leu Tyr Pro Pro Trp Asp Lys
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Asn Phe Thr Glu Asn Asp Leu Leu Val Arg Ile Gly Ala His Ser Arg
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Thr Arg Tyr Glu Arg Asn Ile Glu Ala Ile Ser Met Leu Glu Lys Ile
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Tyr Ile His Pro Arg Tyr Asn Trp Arg Glu Asn Leu Asp Arg Asp Ile
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Ala Leu Met Lys Leu Lys Lys Pro Val Ala Phe Ser Asp Tyr Ile His
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Pro Val Cys Leu Pro Asp Arg Glu Thr Ala Ala Ser Leu Leu Gln Ala
                                             220
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Gly Tyr Lys Gly Arg Val Thr Gly Trp Gly Asn Leu Lys Glu Thr Trp
                                        235
Thr Ala Asn Val Gly Lys Gly Gln Pro Ser Val Leu Gln Val Val Asn
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Leu Pro Ile Val Glu Arg Pro Val Cys Lys Asp Ser Thr Arg Ile Arg
                                 265
Ile Thr Asp Asn Met Phe Cys Ala Gly Tyr Lys Pro Asp Glu Gly Lys
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Arg Gly Asp Ala Cys Glu Gly Asp Ala Gly Gly Pro Phe Val Met Lys
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	cta	t ot	age	ctt	gt.g	cac	agc	cag	cat	gtg	ttc	ctg	gct	cct	cag	96
gcc		CEC	ago	1	V-1	Uio	San	Gln	Hic	Val	Phe	Leu	Ala	Pro	Gln	
Ala	Leu	Cys	Ser	Leu	vai	nis	Sei		1113	141	1 110	Doa	20	•		
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caa	gca	cgg	tcg	ctg	ctc	cag	cgg	gtc	cgg	cga	acc	gcc	acc	agt	gag	144
C1=	110	Ara	Sor	I 611	Len	Gln	Arg	Val	Arg	Arg	Thr	Ala	Thr	Ser	Glu	
GIII	нта		261	Lea	Dod	0111				Ū		45				
		35					40								~~~	192
tac	cag	act	ttc	ttc	aat	ccg	agg	acc	ttt	ggc	tcg	gga	gag	gca	gac	132
Tvr	Gln	Thr	Phe	Phe	Asn	Pro	Arg	Thr	Phe	Gly	Ser	Gly	Glu	Ala	Asp	
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tgt	ggg	ctg	cga	cct	ctg	ttc	gag	aag	aag	COS	,	61	A	Lvo	Thr	
Cys	Gly	Leu	Arg	Pro	Leu	Phe	Glu	Lys	Lys	Ser	Leu	GIU	Asp	Lys	1111	
65					70					75					80	
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gaa	aga	gag		7	61	Car	Тиги	. 110	Acn	Glv	Aro	Tle	Val	Glu	Glv	
Glu	Arg	Glu	Leu	Leu	GIU	ser	INT	116		Uly	111 8	, 110	, , ,	95	Gly	
				85					90							- 000
teg	gat	gca	gag	atc	ggc	atg	tca	cct	tgg	cag	gtg	g atg	ctt	ttc	cgg	336
000	Acn	۸۱۵	Glu	Tla	Ġ1v	Met	Ser	· Pro	Trp	Gln	Val	Met	Leu	Phe	Arg	
ser	ASP	Ala			GIJ	MOC	. 001						110			
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Lvs	Ser	Pro	Glr	Glu	Leu	Leu	ı Cys	: Gly	Ala	Ser	Leu	ı Ile	Ser	Asp	Arg	
5,5		115					120	_				125				
									0+0	+ + 20		T CCC	t.ge	gac	aag	432
tgg	gtc	ctc	aco	gcc	gcc	gco	; Lgo		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	T T	, 00g	D	. Т	Acr	aag	
Trp	Val	Leu	Th1	· Ala	a Ala	Ala	a Cys	s Lei	ı Let	ılyr	rro	Pro) [[[ı vət	Lys	
	130)				13	5				140)				
000	. tto	800	• ฮลเ	ร ลล1	gac	ct.	t cts	ggtg	g cgc	att	t gg	c gc	cac	tcc	cgc	480
aac		, acc	, 546	, uu.	. A	. [. I o	. Vol	Δro	- T1	- G1 ·	v A1:	a His	Sei	Arg	
Asr	1 Phe	Thi	GII	ı Ası			ı Le	ı val	LATE			,			160	
145	5				150					15						E00
aca	agg	tac	ga	g cga	a aad	at	t ga	a aag	g ata	a tco	cat	g tt	g gaa	a aag	g atc	528
Thi	· Arc	7 Tv1	~ G11	ı Arı	z Ası	11	e Gl	u Lys	s Ile	e Se	r Me	t Le	u Glu	ı Lys	s Ile	
1111		5 1 7 3	. 01.						170					175	5	
				16							- a+	~ ~^	0 00	T (12)	att	576
ta	c ato	cad	c cc	c ag	g ta	c aa	c tg	g cg	g ga	g aa	C CL	g ga	C Cg	5 gav	att	0.0
Ty:	r Ile	e His	s Pr	o Ar	g Ty:	r As	n Tr	p Ar	g Gl	u As:	n Le	u As	p Ar	g As	p Ile	
-			18					18					19)		
		+			~ 22	or a a	σ cc	t øt:	t. gc	c tt	c ag	t ga	c ta	c at	t cac	624
gc	e eu	3 ac	g aa	gct	g aa	g aa	. D.	- V-	- 0- 1 11	o Dh	o So	r Ac	n Tv	r 11	e His	
Al	a Lei	ı Me	t Ly	s Le	u Ly	s Ly			T WT	a rn	e 56	T 112	p.,		e His	
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cc	t et	g t.g	t ct	g cc	c ga	c ag	g ga	g ac	g gc	a gc	c ag	c tt	g ct	c ca	g gct	672
D-	- V-	1 (- I	u Dr	ο Δc	n Ar	-σ G1	n Th	r Al	a Al	a Se	r Le	u Le	u Gl	n Ala	
Pr			S Le	uıı	0 113						22					
	21	0				21									+	720
gg	a ta	c aa	g gg	g cg	g gt	g ac	a gg	c tg	g gg	c aa	c ct	g aa	g ga	g ac	g tgg	
G1	v Tv	r Lv	s Gl	y Ar	g Va	1 Th	ır Gl	y Tr	p Gl	y As	n Le	eu Ly	s Gl	u Th	r Trp	
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22	Ö							~ ~		et at	o ct	.a ce	σ σt	g gt	g aac	768
ac	a gc	c aa	c gt	t gg	gt aa	g gg	gg ca	ig cc	, c ag	ار الار 	,,, ,,	^=	-5 5 ·	1 1/-	g aac	
Th	r Al	a As	n Va	1 G1	y Ly	rs G]	Ly G]	ln Pr	o Se	er Va	ıı L€	eu Gl	.n va	T AS	l Asn	•
				24					25					25	ხ	
~4		o a+	+ 11	. a. a.	ag co	rg co	.g g1	tc te	c as	ag ga	ac to	cc ac	c cg	g at	c cgc	816
C1	.g cc	al	, , ,	1 01	~5 UE	D.	0 W	-1 C		- Ο 10 Δα	en Se	er Th	ar Ar	g Il	e Arg	
Le	eu Pr	o 11	.e Va	al G	Lu Al	.g [2]	LU Y	ער רי	(با د،	, o na	יט ער	11		J	e Arg	-

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115 120	125
Trp Val Leu Thr Ala Ala Ala Cys Leu Leu Tyr Pro	o Pro Trp Asp Lys
130 135 140	
Asn Phe Thr Glu Asn Asp Leu Leu Val Arg Ile Gl	J
AST PRE THE GIU ASH ASD LEG LEG VAL HIS ITE OF	
155	
145 150 155	y Ala His Ser Arg 160
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Pro Val															_	
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Inr Ala	ASII	vai	245	D , D	01)			250					255	5		
Leu Pro	T1.	Vo I	Clu	Δνα	Pro	Val	Cvs		Asp	Ser	Thr	Arg	Ile	A:	rg	
Leu Pro	He		GIU	A1 B	110	rai	265	2,0				270				
		260		nı.	C	۸۱.		Tur	lve	Pro	Asn		Gly	, L	γs	
Ile Thr		Asn	Met	Pne	Cys		GIY	1 9 1	Буз	110	285	01-	,		•	
	275					280	4.7	01	C1	Dwa			Met	r I.	VS	
Arg Gly	Asp	Ala	Cys	Glu		Asp	Ala	Gly	GIY	100	rne	Yaı	MIC.	ט ט	,, 0	
290					295				0.1	300		C	Т	~ C	1	
Ser Pro	Phe	Asn	Asn	Arg	Trp	Tyr	Gln	Met	Gly	Ile	· val	Ser	1 r)	o o	11 y	
305				310					315						20	
Glu Gly	Cys	Asp	Arg	Asp	Gly	Lys	Tyr	Gly	Phe	Tyr	Thr	His	۷a	1 1	'he	
			325					330					33	5		
Ala Leu	Lvs	Lvs	Trp	Ile	Gln	Lys	Val	Ile	Asp	Glr	n Phe	Gly	G1	u		
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atc act Ile Thr		aac					ggt					gaa			864
cga ggg Arg Gly 290	gat					gac									912
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	Arg	Tyr	Glu	Arg 165		Ile	Glu	Lys	Ile 170	Ser	Met	Leu	Glu	Lys 175	Ile
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